MILLIONAIRE

THE STOCK MARKET SIMULATION™

BLUE CHIP SOFTWARE™

BLUE CHIP SOFTWARE

6740 Eton Avenue
Canoga Park, CA 91303
(818) 346-0730

TABLE OF CONTENTS

Introduction 2
What is a stock? 3
Factors that influence your decision 3
The stock option 4
Borrowing against your net worth 5
Millionaire ground rules 6
The investment scene 7
Getting started 7
New and saved games 8
First time players 8
Previous players 8
Stock market graph 8
Industry groups 9
News... 9
...and its effect 10
Figuring your net worth 11
Graph menu 11
Researching your purchase 12
Corporate history 12
Individual stock graph 12
Weekly prices 13
Buying 13
Transaction reports 14
Viewing your portfolio 15
Option portfolios 15
Selling 15
Loans and interest charges 16
Game strategy 17
Glossary of terms 18
Loading instructions 20

INTRODUCTION

Welcome to Millionaire, a captivating adventure into the world of stock market investing. You are about to experience the thrill of high finance while learning basic stock market terms, skills, strategies, and concepts.

You will be entering a remarkable simulation of the real world, because Millionaire is based on actual stock market trends and historical events, not just random numbers.

At the beginning of each game, your computer creates a new stock market environment, just for you. No two environments are ever exactly alike. Just like in real life.

The environment consists of 91 weeks of stock market fluctuations. As you begin the game, 13 weeks have passed. This provides a history you may use to begin plotting strategies as you start down the road to your fortune.

Before you order your Ferrari Turbo Coupe and Lear Jet, however, there are a few terms you must become familiar with.

WHAT IS A STOCK?

A piece of the action, one might say.

Or of a corporation, to be precise. In order to raise money — working capital to build factories, fund research, etc.— a corporation sells shares. These shares are "stock" in the company. Individuals who purchase stock become part owners of the company.

How much of a company you own depends not upon how many shares you buy, but upon the proportion of the number of shares you own to the total number of shares issued by the company. An investor who owns 100 shares of a company with 1,000,000 shares outstanding owns a smaller part of a company than an investor who owns only 10 shares of a company with just 100 shares outstanding.

Stock owners can usually resell their stock through a stock exchange, which is simply a place where representatives of the buyer and seller — called brokers — meet and negotiate prices. Stock prices are determined by several factors, including: the company's current profits, anticipated future profits, the value of assets (factories, patents, real estate, etc.), and cash on hand.

If a company's prospects are optimistic, then its stock will be in demand, and the price will rise. Conversely, if prospects are dim, the price will drop.

Why would you buy stock in a company?

Long-term investors hope to receive a portion of the corporate profits, called dividends. Furthermore, such investors hope for the price of the stock to increase as the size of the company grows. In real life, there are also many tax incentives to investing money in corporations.

On the other hand, there are those who look to make a profit in a shorter period of time. By "hopping on the bandwagon" of a stock that has a rapid upward change in price (due to several different reasons), the investor makes a substantial windfall profit. This is considered "speculation."

In Millionaire, as in real life, speculators are the ones who "get rich quick." In order to do so, of course, they must accept much more risk than the long-term investor is generally willing to do.

FACTORS THAT INFLUENCE YOUR DECISION

In order to minimize his risks, a speculator looks at many factors to determine which way a stock price will go. The following factors influence the market:

1. **The profitability of a corporation.** Normally announced every three months in an earnings statement. Profits are referred to as "earnings."
2. **Changes in the number of shares traded on the stock exchange.** Sudden increases in stock sales can signal a significant price change is imminent. This may be due to "insider trading" (shares sold by company officials who may know more than the general public), or large trades by institutional investors.
3. **News announcements about a company.** These can have a dramatic effect on a company's stock price, for obvious reasons.
4. **Stock price trends.** Analyzing the stock price fluctuations over time can give clues to future performance. History tends to repeat itself.
5. **Industry group trends.** Looking at a single industry can yield clues not visible in a single stock's price fluctuations. Certain factors will affect an entire industry, and this will be reflected in the price of individual corporate stocks.

EXAMPLE: A harsh winter storm immediately prior to the Christmas season will have a dramatic effect on the retail industry, because shoppers won't go to stores in poor weather. This factor would affect most companies in the retail industry group.

6. **Stock market trends.** The stock market sometimes seems to have a life of its own that can cause individual stock prices to move illogically. The market goes through cycles: when stock prices generally rise, it is referred to as a "bull market." When they fall, a "bear market."

   In a bear market, for example, a company's stock price may drop along with the market even though the company's profits —called "earnings"— are increasing.
7. **The company history.** Understanding a company's roots can be helpful in identifying unusual corporate moves that may affect stock prices.
8. **Daily stock price changes.** Daily changes in stock prices, new highs or lows, are the key to many buy and sell decisions.

Once a speculator has analyzed all these factors (no simple task, obviously, or we'd all be rich), he looks for a stock that he expects to experience a rapid change in price. (It need not be an upward change in price, by the way, which will be explained later.)

If he has made arrangements with a broker, he may purchase the stock on credit. This is called margin buying. In such a transaction, the buyer must normally make a down payment of at least 50% of the value of the stock, and the broker extends credit to him on balance. If a stock purchased on margin goes down rather than up, the broker may "call" the margin. This forces the speculator to come up with enough money to return his equity to the 50% level.

In Millionaire, a margin call occurs when the speculator's equity drops below 30%. If the speculator does not have enough cash to cover the margin call, then some, or all, of his stocks will be sold by the broker. In Millionaire, all of the margined stock will be sold if funds do not exist to cover the margin call. The obvious advantage of buying on margin is that you pay only a portion of the total price and your broker extends credit to you on the balance. In Millionaire, there is an 18% annual interest charge on margin credit.

THE STOCK OPTION

Options are simply the right to buy or sell shares of a stock (usually in "lots" of 100) at a price agreed upon in advance. Options are extended only for a limited period of time, and automatically decline in value as the expiration date for the option approaches. An expired option is worthless.

There are two types of options: "put" options and "call" options. The call option is the right to purchase stock for a previously agreed upon price. The put option is the right to sell stock for a previously agreed upon price. The rise of a stock's price causes a call option to increase in value.

EXAMPLE: In June, K-Mart stock is trading for $50.00 a share. You pay $1.00 for each $55.00 call option that expires in September. In July, the price of K-Mart stock is unchanged, but your option is now worth only $.70, as the expiration date is one month closer. In August, the price of K-Mart stock jumps to $60.00 a share. As your options entitle you to buy stock at $55.00, you could exercise your option, buy K-Mart stock at $55.00, and resell it for $60.00. Your profit would be $5.00 per share, less the initial option price. In reality, options are seldom exercised but are sold to other speculators. In this example,

when K-Mart jumped to $60.00, the price of the option would have increased to around $5.50, and could be sold for a profit of $4.50 per option ($5.50 sale price minus $1.00 purchase price).

EXAMPLE: In June, K-Mart is trading for $50.00 per share. You pay $1.00 for each $45.00 put option that expires in September. If the price of K-Mart stock rises to $60.00 the next day, the value of the option will drop to around $.80, because the stock price is now $15.00 away from the striking price ($45.00). In August, the price of K-Mart stock drops to $35.00 per share, and your K-Mart options jump to $10.50 per option. Savvy investor that you are, you sell and pocket the hefty profit.

As these two examples illustrate, a **call option** is purchased when you believe the stock price will rise significantly. A **put option** is purchased when you believe the price will fall significantly.

Sometimes options are used for protection. For example, if you purchase shares of Dow Chemical at 120, you might purchase an equal number of put options enabling you to sell Dow Chemical at 100. This is "insurance" that protects you against catastrophic loss.

Options in Millionaire are best used for speculation. If you believe a stock will rise or fall dramatically, the lower price of options will permit you to "control" far more shares (and potential profit) than if you bought the shares outright. This is called "leverage."

In speculative investing, you wish to get the most leverage possible. That is, to control as many shares of stock as possible given your current resources. $100 worth of options gives you greater leverage than $100 worth of stocks because you control more shares (since options trade at a fraction of the price of the stock). Borrowing money to purchase options increases your leverage further, by permitting you to control stock with very little of your own money.

Another technique of leveraging is called "selling short." If a short seller believes the price of a stock will fall dramatically, he "borrows" the stock from another investor for a fee. He then sells the stock and banks the receipts. When the stock then falls in price, he buys it on the open market, and returns it to the original investor, pocketing the difference in price as his profit. The only expense the short seller incurs is the fee paid to borrow the stock. Of course, if his calculations are off and the stock **rises** in price, he must make up the difference when he goes to the market to replace the stock. Short selling is very risky and is not a technique available to players in Millionaire.

A shrewd speculator may reap huge profits with very little personal resources through leveraging. The more leveraged you are, the greater the risk, of course. A small downward price fluctuation that might prove a minor annoyance to the owner of stock may spell doom to the highly leveraged investor, collapsing what is basically a house of cards.

BORROWING AGAINST YOUR NET WORTH

In some cases, a speculator can borrow money from public and private sources using his assets (including stock) as collateral. Loans of up to 80% of your net worth are possible. Buying stocks with money borrowed against your assets and 50% margin can give you tremendous leverage (and risk). Interest, of course, must be paid on any loans as with margin accounts.

When you buy or sell stock through a broker, the broker takes a percentage of the total transaction as his commission. In Millionaire, commission is 1.5% of the total transaction value.

Nothing escapes the clutches of Uncle Sam, and that goes for money made in the stock market. How much tax depends on the individual's tax bracket. In general, short-term profits (from stocks held less than one year) are taxed at twice the rate of long-term profits (on stocks held at least one year). Losses reduce the tax burden by the same proportions. In Millionaire, the tax rate is fixed at 30%. If it were only that way in real life...

The stocks one holds are called a **portfolio.** In Millionaire, you will have three portfolios: one each for stock, call options, and put options.

If you wish to learn more about the stock market (the more you know, the better your analysis will be), investigate "Your Investments" available from any good bookseller. It is published by Dun & Bradstreet, one of Wall Street's most respected investment firms.

Although Millionaire uses concepts based upon the actual stock market, there are many subtle (and not so subtle) differences between the simulation and real life. If you plan to invest in the market, you should investigate books like the one mentioned above.

MILLIONAIRE GROUND RULES

The objective of Millionaire is to earn $1,000,000 as quickly as you can. To do this, you must make shrewd, timely investments in stocks and options.

You start out with a Novice status and $10,000 cash. As a Novice, you may buy or sell stocks. You may not purchase stocks on margin, or purchase options.

Net worth is the yardstick of success in Millionaire. Your net worth is defined as the sum of all your assets (cash, stocks, options), less your liabilities (loans, taxes, and commission obligation).

As your net worth increases, your status will be raised; as your status rises, so will your investment alternatives. Figure 1 sets forth the privileges of rank.

FIGURE 1*

Net Worth	Investment Opportunities	Status
$ 10,000	Stocks	Novice
$ 12,000	Margin stocks	Investor
$ 18,000	Call options	Speculator
$ 40,000	Put options	Professional
$ 100,000	Loans to 80%	Broker
$1,000,000		Millionaire

*You may only advance one status level in a single week. If you are a Novice who suddenly makes $100,000, you must wait a few weeks to obtain Broker status.

EXAMPLE: When your net worth reaches $12,000 or greater, you will become an Investor and will be able to buy stocks on margin. When you reach $18,000, you will be able to buy call options in addition to margined stocks.

Once your status has been raised to a certain level, it will not be reduced even if your net worth should drop below the required level. For instance, if you become an Investor by obtaining a net worth of $12,000, a subsequent drop in net worth to $8,000 will not reduce your status.

If, during the game, your net worth drops below $1,000, you will be declared bankrupt, your status dropped to Novice, and you will be given $7,500 to start your quest for $1,000,000 again.

When you reach Millionaire, you will be given $50,000 and started out on a quest for your next million dollars. The objective, once you have become a Millionaire, is to find out how quickly you can earn another $1,000,000. Be careful not to go bankrupt and lose it all.

THE INVESTMENT SCENE

At the start of the simulation, the computer creates a new stock market environment. You begin in week 14 of a 91-week simulation. Each week you have the opportunity to buy and sell stocks and options.

With each new week, the stock prices change, just as they do on Wall Street. At week 91, your assets are converted to cash, and—along with your status—are saved by the computer. You can then begin a new session of 91 weeks using the cash and status earned in the previous sessions. With a little luck and a lot of skill, you will become a Millionaire. But it will probably take you several sessions to do so.

Millionaire can store up to 14 players' data (end of session cash and status). If you wish to stop a session before the 91st week, you may store the complete game status, including the market environment, in a save file for later recall.

The Millionaire stock market consists of 15 stocks in 5 industry groups: computers, oil & gas, retail, automotive, and heavy industry. Please refer to Figure 2.

FIGURE 2

Industry	Stock	Abbreviation
Computer	Control Data	(CDC)
	IBM	(IBM)
	NCR	(NCR)
Oil & Gas	Conoco	(CNO)
	Exxon	(EXX)
	Mobil	(MOB)
Retail	K-Mart	(KMT)
	Sears	(SRS)
	Tandy	(TDY)
Auto	General Motors	(GM)
	American Motors	(AM)
	Bendix	(BDX)
Heavy	United States Steel	(USS)
	Dow Chemical	(DOW)
	Caterpillar Tractor	(CAT)

GETTING STARTED

FIGURE 3

MILLIONAIRE
THE STOCK MARKET SIMULATION™

BY
BLUE CHIP SOFTWARE
COPYRIGHT 1982, 83, 84

VERSION 2.X
WRITTEN BY
JIM ZUBER

Do you want to play a new game, a saved game,
or clear the player directory?
Type new, saved, or clear, and press return.

If you followed the enclosed loading instructions, you will see Figure 3 come up on your computer.

NEW AND SAVED GAMES

To start playing the game, type NEW and press RETURN. If you are resuming a game that was saved, type SAVED. A saved game will take a few minutes to load. Only one saved game may be stored at a time; each subsequent saved game erases a previous saved game.

Once NEW is typed, you will see Figure #4.

FIGURE 4

Name	Last Score	High Score	Status
1 BC	$100,000	$100,000	Broker
2 JS	$ 15,000	$ 17,500	Investor
3 SK	$ 23,000	$ 37,000	Speculator

Enter player number to start.
If you are a new player, press RETURN.
?

FIRST TIME PLAYERS

If this is your first time playing Millionaire, press RETURN. The computer will then ask you to enter your name. You can enter any name or initials up to 5 characters. Press RETURN after typing your name and the computer will begin creating a new stock market environment. This process takes several minutes.

NOTE: Even if this is the first time you have used your Millionaire disk, you will notice that your player directory has a listing for "BC." This is a special test player used by Blue Chip Software.

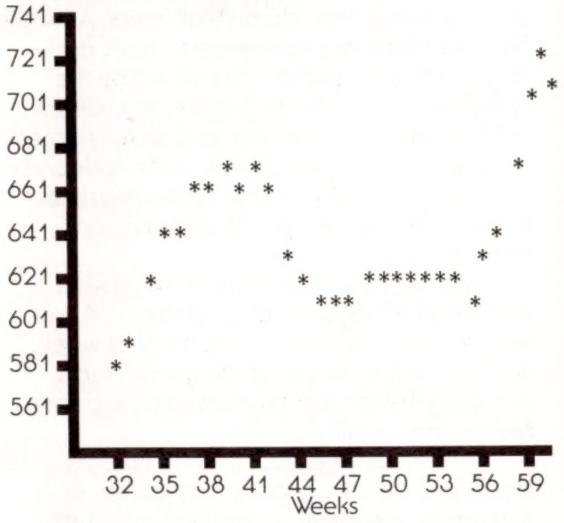
PREVIOUS PLAYERS

If you have played the game before, type the number to the left of your initials and press RETURN. Your last score (cash) and status will be carried into the new session. The computer will then start creating a new stock market environment.

FIGURE 5

Press any key to continue

STOCK MARKET



STOCK MARKET GRAPH

Once the computer has created a new market environment, you will see a graph like the one above, but with only 14 weeks of data on it. Remember, you begin the session

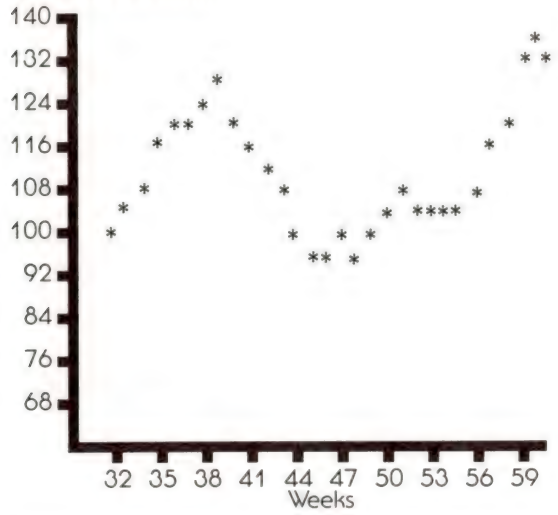
in week 14. The stock market graph is the first thing you will see with each new week. It is a graph of the overall market trend. The graph above shows the market in week 61, the horizontal axis of the graph is in weeks and the vertical axis is the sum of the 15 stocks traded in Millionaire. An upward trend indicates that, on the whole, stocks are increasing in price.

Press any key to continue the game.

FIGURE 6

Press any key to continue

OIL & GAS INDUSTRY



INDUSTRY GROUPS

Next, you will see a graph for one of the five industry groups. As mentioned before, an industry group consists of three stocks.

EXAMPLE: The computer industry consists of Control Data, IBM, and NCR. The vertical axis of the graph is the sum of the activity of the three stocks in the industry group. The industry trend is a much more precise indicator of stock movement, as only three stocks are involved. One of the five industry groups will be displayed with each new week.

Press any key to continue.

FIGURE 7

The Financial Journal

Heavy Industry experts predict a poor quarter ahead.

Control Data earnings per share decreased 11%.

Mobil Oil opened their first service station in Alaska.

Press any key to continue.

NEWS...

The computer will next display the week's FINANCIAL JOURNAL. News items can signal price movements, or may be inconclusive. The stock price fluctuations in Millionaire are tied to these news items. Of all the clues given in Millionaire, the news items are the most significant.

...AND ITS EFFECT

Next you will see the weekly stock price changes. This is similar to picking up the newspaper each morning to see what happened in yesterday's trading. In the center column, labeled STOCK, are the abbreviated names of the fifteen stocks. To the right of the stock name is the closing price of the stock. This is the new stock price for the current week. The column labeled CHANGE shows how much the stock price changed from last week. A minus sign means that the stock price has fallen. The columns labeled HIGH and LOW are the highest and lowest prices the stock has traded at since the start of the session. An asterisk (*) next to the closing price indicates a new high or a new low for that stock. Below the tables is an analysis of the week's changes. This analysis includes the number of stocks that increased in price, the number of stocks that decreased in price, the total market change (sum of the 15 changes) and the average price change per share.

Press any key to enter the command mode.

FIGURE 8

High	Low	Stock	Close	Change
90.20	38.08	CDC	90.20*	1.04
45.36	32.00	IBM	45.36*	1.44
62.36	37.44	NCR	60.24	−2.12
78.00	39.72	CNO	65.32	−4.00
37.60	31.00	EXX	36.36	−1.08
62.60	30.36	MOB	62.56	−0.04
66.16	29.00	KMT	61.76	−1.72
69.36	28.28	SRS	66.16	−3.20
51.68	30.24	TDY	46.92	−1.68
27.80	22.28	GM	24.12	−1.28
56.92	28.80	AM	54.84	−2.08
41.40	27.72	BDX	38.44	−0.88
42.60	30.20	USS	42.60*	2.36
60.80	33.20	DOW	60.80*	4.08
61.16	32.88	CAT	61.16*	5.92

There were 10 losers this week.
There were 5 winners this week.
The market lost 2.5 points.
An average share gained $0.22.

Press any key to continue.

FIGURE 9

WEEK: 15		BROKER	
INTEREST:	$ 0	LOANS:	$ 0
NET WORTH:	$100,000	CASH:	$100,000

MENU SELECTION

DESC — Display company descriptions
GRAPH — Display graphs
NEWS — Display Journal/stock changes
COST — Display stock/option prices
PORT — Display a portfolio
BUY — Start a buy transaction
SELL — Start a sell transaction
LOAN — Borrow against net worth
WEEK — Advance to next week
END — Leave Millionaire session

Enter action desired:

You are now in the command mode. This is where you buy and sell stocks or options. An easy-to-understand menu is displayed when you first enter the command mode.

Entering the first letter of one of the command words will initiate the action described in the menu.

For example, typing E for END will cause Millionaire to ask:

ARE YOU SURE (YES OR NO)?

Typing N will return you to the command mode. Typing Y will cause the computer to ask:

SHOULD I SAVE THIS GAME (YES OR NO)?

Typing Y will cause the current game status and market environment to be saved on the disk. Typing N will result in exiting the game without saving the market environment. When you select not to save the current game, your assets will be liquidated, your cash and status will be saved in the player directory. When you save a game, the player directory is not updated.

In the command mode, the display is broken into three areas. The top three lines are the game status area. The game status area displays the current week, your status, interest charges for the previous week, the value of outstanding loans (excluding margin), your net worth, and the cash you have available to purchase stocks and options with.

The display area is in the center of the screen and is used to display stock/option prices, portfolios, and the results of buy and sell transactions.

The bottom of the display is the command area. All commands are entered in response to "Enter action desired:" Below the command line is the error and prompt line (presently blank). This line is used to prompt for information regarding buying or selling stock.

FIGURING YOUR NET WORTH

The calculation of your net worth deserves a little more explanation. The following factors are considered when calculating your net worth.

1. The value of all your cash, stocks, and options.
2. Minus all margin accounts and loans.
3. Minus potential sales commission costs at present prices.
4. Minus a 30% tax on the gross profit made on all stocks and options at current prices. If you lose money on a transaction, you will receive a 30% tax credit.

Typing W for WEEK in the command mode will advance you to the next week.

FIGURE 10

1-Control Data	(CDC)
2-IBM	(IBM)
3-NCR	(NCR)
4-Conoco	(CNO)
5-Exxon	(EXX)
6-Mobil Oil	(MOB)
7-K-Mart	(KMT)
8-Sears	(SRS)
9-Tandy	(TDY)
A-General Motors	(GM)
B-American Motors	(AM)
C-Bendix	(BDX)
D-United States Steel	(USS)
E-Dow Chemical	(DOW)
F-Caterpillar Tractor	(CAT)
G-Computer Industry	
H-Oil & Gas Industry	
I-Retail Industry	
J-Auto Industry	
K-Heavy Industry	
L-Stock Market	
M-RETURN TO MENU	

Enter letter of graph desired:

GRAPH MENU

Entering G for GRAPH in the command mode will result in the menu above being displayed. By selecting the number or letter of the graph you want, any of the 15 stocks, 5 industry groups, or stock market graphs can be displayed. To return to the command menu, type M.

RESEARCHING YOUR PURCHASE

Before you buy a stock, you can research the company, price trends, past and present reports in the Financial Journal...anything that can help you predict future performance.

FIGURE 11

1-Control Data (CDC)
2-IBM (IBM)
3-NCR (NCR)
4-Conoco (CNO)
5-Exxon (EXX)
6-Mobil Oil (MOB)
7-K-Mart (KMT)
8-Sears (SRS)
9-Tandy (TDY)
A-General Motors (GM)
B-American Motors (AM)
C-Bendix (BDX)
D-United States Steel (USS)
E-Dow Chemical (DOW)
F-Caterpillar Tractor (CAT)
G-RETURN TO MENU

Enter letter of description desired:

CORPORATE HISTORY

One way to research a stock is by reading the corporate history. Typing D for DESC will result in the display of the menu above. To read the company history, type the appropriate number or letter. Type G to return to the command mode.

Once you have read the company history, you may wish to research how the company has fared in previous reports in the Financial Journal. Type N to display the week's Financial Journal (this information was seen previously as you began the week). At this point, you may research the Financial Journal all the way back to week 14. To read news reports in reverse chronological order, type B after each report.

FIGURE 12

Exxon (EXX)

With $79.1 billion in revenues last year, Exxon was number one in oil, natural gas, and retail gasoline sales. Exxon owns 13,000 oil wells and has 62 refineries in 33 countries. Founded in 1870 by John D. Rockefeller, a monopoly was created in 10 short years that controlled 95% of the nation's oil. In 1911, the Supreme Court ordered Rockefeller's company be broken up into 34 separate companies including Mobil Oil and Standard Oil of California. Exxon is a member of the oil and gas industry group.

Press any key to continue.

Note that this option is available only when accessing the Financial Journal through the command mode. You cannot research "back issues" during the news cycle at the beginning of the week.

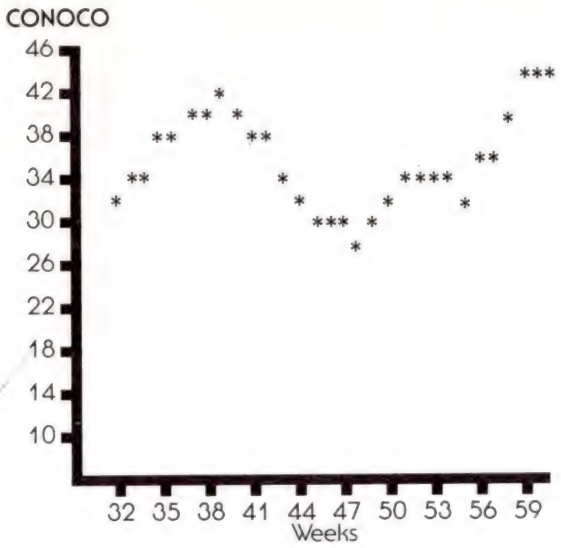
When you have finished reading the news, press any key to display stock price changes. Then press any key to return to the command mode.

INDIVIDUAL STOCK GRAPH

The stock graph shows the fluctuations of a particular corporation. Past stock price performance may give clues to future changes. Once you have purchased a stock or option, the graph of its price history will be displayed at the beginning of each week, as long as you own the stock or option. See Figure 13.

FIGURE 13

Press any key to continue



WEEKLY PRICES

Typing C for COST in the command mode will display the current stock and option prices. The columns labeled CALL and PUT are the striking prices for the respective type of option. Once the prices are displayed, you can press any key to return to the command mode.

In Millionaire, the striking price of a call option is $5.00 above the current stock price, and a put option is $5.00 below the current stock price. An option will expire 26 weeks from the purchase week.

FIGURE 14

WEEK: 61 BROKER

INTEREST: $ 0 LOANS: $ 0

NET WORTH: $100,000 CASH: $100,000

STOCK AND OPTION PRICES

STK	STOCK	OPTION	CALL	PUT
CDC	$28.44	$0.85	$33.44	$23.44
IBM	$34.08	$1.02	$39.08	$29.08
NCR	$34.84	$1.04	$39.84	$29.84
CNO	$44.52	$1.33	$49.52	$39.52
EXX	$57.48	$1.72	$62.48	$52.48
MOB	$31.96	$0.96	$36.96	$26.96
KMT	$48.08	$1.44	$53.08	$43.08
SRS	$53.64	$1.60	$58.64	$48.64
TDY	$37.68	$1.13	$42.68	$32.68
GM	$46.72	$1.40	$51.72	$41.72
AM	$42.12	$1.26	$47.12	$37.12
BDX	$68.88	$2.06	$73.88	$63.88
USS	$49.84	$1.49	$54.84	$44.84
DOW	$57.56	$1.72	$62.56	$52.56
CAT	$56.44	$1.69	$61.44	$51.44

Press any key to continue.

BUYING

Once you have done all the research you feel is necessary, you are ready to make a purchase. To buy stocks or options, type B for BUY in the command mode. You will see stock and option prices displayed (as shown in Figure 14). The following prompt line will appear:

ENTER TYPE (STOCK, CALL, PUT, EXIT)

Type the first letter of your choice (stock, call, or put) to indicate the type of investment you wish to make. If you decide not to buy, type E for EXIT and return to the command mode.

All input errors when buying or selling will cause you to be returned to the ENTER TYPE prompt. Once you have entered the type of investment you want, the following question will be displayed on the prompt line:

ENTER STOCK NAME (EXAMPLE: CDC)?

Type the three letter abbreviation of the stock or option you wish to buy. If you wanted to buy Control Data Corporation, you would type CDC and press RETURN. At this point, the prompts for stocks and options differ somewhat.

If you are purchasing stocks, and your status is above Novice, you will be asked to enter a margin percentage between 0 and 50%. This is the percentage of the stock price you wish to borrow. If you press only RETURN, 50% margin will be assumed. The computer will then ask you to enter the number of shares you want to buy. The maximum number of shares you may purchase will be shown in brackets.

Example: ENTER QUANTITY (MAX=21)?

If you are purchasing options, you will be asked to enter the number of lots you desire. Remember that a lot is 100 options. You may not purchase options on margin. The maximum number of option lots will also be shown in brackets.

TRANSACTION REPORTS

Once you have completed entering the requested information, the buy order will be executed. You will see displayed a buy transaction report. Press any key and you will be returned to the command mode. The net cost is your out-of-pocket cost for the stocks or options.

FIGURE 15

WEEK: 63		SPECULATOR	
INTEREST:	$ 39	LOANS:	$ 0
NET WORTH:	$18,578	CASH:	$5,335

BUY TRANSACTION REPORT

STOCK:	IBM
TYPE:	Call Option
QUANTITY:	10 LOTS
PRICE:	$ 1.47
COST:	$1470
COMMISSION:	$ 22
MARGIN:	$ 0
NET COST:	$1492

Press any key to continue.

FIGURE 16

WEEK: 62		BROKER	
INTEREST:	$ 106	LOANS:	$ 0
NET WORTH:	$103,505	CASH:	$58,278

COMMON STOCKS

RF STK	QTY	PURCH	CURNT	EQ%	POSITION
1 GM	50	46.72	50.32	54	180
2 AM	400	42.12	44.64	62	1008
3 BDX	500	68.88	73.56	53	2340
4 CAT	200	56.44	59.64	53	640

Press any key to continue.

VIEWING YOUR PORTFOLIO

Typing P for PORT in the command mode will let you display your portfolio. You have one portfolio each for stocks, call options, and put options. The computer will prompt you with ENTER TYPE (STOCK, CALL, PUT, EXIT). Typing S for STOCK will display your current portfolio of stock holdings. Refer to Figure 16.

Under RF is the reference letter for each item. Under QTY is the number of shares you own, and under PURCH is the price you paid for the stock. If you have purchased the stock over several weeks, you will see the average purchase price. Under CURNT is the current price of the stock on this week's market. Under EQ% is the percentage of the stock you own (the balance is in borrowed funds). If you purchase stocks on margin, your equity will be less than 100%. You must remember that if your equity drops below 30%, your margin account will be called and you may have to sell stock to restore the minimum level of equity.

Under POSITION is the difference between the gross purchase price and the current value of the stock. This does not take into account margin, taxes, or commission. A positive value means your stock is worth more now than when you bought it.

OPTION PORTFOLIOS

To see your option portfolios, type P from the command mode. Then, in response to the ENTER TYPE prompt, type C for CALL, or P for PUT, to display your call or put portfolio. You are allowed to own up to 15 call and 15 put options at any one point in time. Refer to Figure 17. Under R is the reference number letter for each item. Under QTY is the number of lots owned. Remember, each lot has options on 100 shares. Under EX is the expiration week of the option. Under STRIKE is the striking price of the option. Under STOCK is the current price of the optioned stock. Under CURNT is the current stock option value. Under PROFIT is the difference between the gross purchase price of the option and the present value. A positive value indicates that your options are worth more now than when you bought them. Two points to remember about options: first, the price of an option drops as the expiration date approaches. It is not unusual to have a stock price increase moderately, but have the call option price drop due to the passage of time. Second, when the stock price crosses the striking price, large profits are made since every $1.00 change in stock price is reflected in the option price. After you have examined the portfolio of your choice, press any key to return to the command mode.

FIGURE 17

WEEK: 62		BROKER	
INTEREST:	$ 106	LOANS:	$ 0
NET WORTH:	$103,505	CASH:	$58,278

CALL OPTIONS

R	STK	QTY	EX	STRIKE	STOCK	CURNT	PROFIT
1	IBM	10	87	39.08	36.88	1.06	41
2	USS	20	87	54.84	52.76	1.52	53
3	SRS	15	87	58.64	60.60	3.70	3148

Press any key to continue.

SELLING

Typing S for SELL in the command mode will allow you to sell stocks and options in your portfolio. After you type S, the computer will ask you to enter the type (stock, call, or put) you wish to sell. As in the buy transaction, entering E for EXIT in response to the ENTER

TYPE question will return you to the command mode. Next, your portfolio will be displayed for the type of investment you selected to sell (stock, call, or put portfolio). The computer will then ask you to enter the reference letter of the stock or option you wish to sell.

At this point the prompts for stocks and options differ. If you are selling stocks, you will be asked to enter the number of shares you wish to sell. You do not have to sell all of a particular stock's shares or options at one time. You could sell 10 this week, and 20 next week.

If you are selling stock options you will be asked to enter the number of lots to be sold.

FIGURE 18

WEEK: 63		SPECULATOR	
INTEREST:	$ 39	LOANS:	$ 0
NET WORTH:	$18,609	CASH:	$6,827

SELL TRANSACTION REPORT

STOCK:	American Motors
TYPE:	Common Stock
QUANTITY:	200
PRICE:	$52.80
SALE AMOUNT:	$10560
COMMISSION:	$ 158
MARGIN:	$ 3556
SUBTOTAL:	$ 6846
TAXES:	$ 955
CASH RECEIVED:	$ 5891
NET PROFIT (LOSS):	$ 2228

Press any key to continue.

Once you have entered the requested information, the sell order will be executed. You will see a sell transaction report displayed that details the results of the sale. Cash received is just that, the cash you received from the sale. Net profit (loss) takes into account the effects of taxes, commissions, and margin on your sale. Parentheses around taxes indicate a tax credit because you lost money on the sale of stocks or options.

LOANS AND INTEREST CHARGES

You may borrow money to make stock and option purchases if your status is Broker. When you type L for LOAN in the command mode, you will be asked to enter the amount of money you wish to borrow. Typing MAX in response to this question will result in your being given the maximum loan possible. If you enter a dollar amount in response to this question, remember that you may only borrow up to 80% of your net worth, and your total loans may not exceed $500,000 (excluding margin accounts). The interest charges on loans and margin accounts are deducted from your cash on a weekly basis. The annual interest on loans is 18%, and there is no way to pay the loan off for the balance of the session, so be conservative. Interest charges can seriously erode your available cash.

GAME STRATEGY

The following helpful hints will increase your pleasure while playing Millionaire.

1) Have a note pad and pencil handy as you play the game. You may want to note significant news items and stock trends on the note pad for future reference.
2) At the start of a session, you may wish to go through a few weeks before making your first investment. This will allow you to select a stock with good prospects for success.
3) Stock options offer you the greatest potential for profits, and for loss. Remember that a stock option decreases in value with time.
4) Make sure to keep enough cash on hand to cover interest charges and possible margin calls.

NOTE: For those players who are familiar with the stock market, you have probably recognized the fact that the 3-letter symbols Millionaire uses to identify a particular stock are somewhat different than the 3-letter symbols that are actually used in the stock market. For example: Control Data Corporation is, in reality, symbolized by CDA. In Millionaire, we use CDC. Similar liberties were taken with other symbols in the interest of making them easier for the player to remember.

GLOSSARY OF TERMS

Bear market
When investors believe the stock market will fall. One who is "bearish" on the stock market believes in selling shares at the current time. (Page 4)

Broker
A licensed individual who represents a buyer or seller of stocks in a transaction. He receives a commission for his services.

Bull market
When investors believe the stock market will rise. One who is "bullish" on the stock market believes in buying shares at the current time. (Page 4)

Call option
The right to buy stock in a corporation for a specified price before a specified time. (Pages 4, 5, 15)

Commission
The fee paid to a broker for finding a buyer or seller for a transaction, and executing the purchase or sale. In Millionaire, the commission is 1.5%.

Earnings
The profits of a corporation. (Page 4)

Industry group
Corporations in competition with one another to sell a particular product or service. In Millionaire, 3 corporations form an industry group. (Pages 3, 9)

Insider trading
Buying or selling by "insiders," corporation personnel who presumably have knowledge not yet available to the public. Frequently referred to in the Financial Journal. (Page 3)

Institutional investor
An organization whose primary purpose is to invest its own assets or those held in trust by it for others. Examples include pension fund insurance companies, investment companies, mutual funds, universities, and banks.

Investor
One who buys stocks or options.

Leverage
The use of speculative tools to control more shares of stock than one could by purchasing the shares outright. (Page 5)

Long-term investor
An investor whose primary goal is not short-term gain but steady growth of capital. The long-term investor generally takes fewer risks. (Page 3)

Loser
A stock whose price went down during a given week.

Lot
Unit of 100 shares of stock.

Margin call
When the shareholder's equity in a stock drops below a previously agreed upon amount (in Millionaire, 30%), he must sell his holdings in order to restore his other shares to the minimum level of equity, unless cash is available to cover the margin call. (Page 4)

Net worth
The value of an individual's cash, plus securities, minus potential commissions, taxes, and interest. (Pages 6, 11)

Odd lot
A unit less than 100 shares of stock.

Portfolio
Listing of stocks or options that an investor owns. (Page 6)

Put option
The right to sell stock in a corporation for a specified price before a specified time. (Pages 4, 5, 15)

Selling short
A speculative technique used when an investor believes the price of a stock is about to drop dramatically. The investor borrows shares (for a fee) from a broker, sells them, and banks the proceeds. When the stock drops in price, he buys the shares back and returns the shares to the loaning broker. The difference between the two prices is his profit. (Page 5)

Shareholder
One who owns stock in a corporation. (Page 3)

Short-term investor
A person who holds their stocks for less than one year. (see Speculator)

Speculator
One who is willing to take large risks in order to achieve significant profits over the short-term. (Pages 3, 4, 5)

Stock
Part ownership of a corporation, expressed in shares. (Page 3)

Stock exchange
A place where stocks and options are bought and sold. The most prominent stock exchange in America is the New York Stock Exchange, where stocks of the largest corporations are traded.

Striking price
The stock price at which an investor may buy or sell an option, and make a profit.

Trend
A sequence of events giving evidence of a direction. A stock that rises for several weeks exhibits an upward trend. (Pages 4, 9)

Volume
The number of shares of stock sold during a given week. "Heavy volume" means that many shares were traded.

Winner
A stock whose shares went up in price during a given week.

MILLIONAIRE LOADING INSTRUCTIONS
MS-DOS

A. HOW TO PREPARE YOUR DISK FOR USE

1. Turn on your computer with the DOS disk in drive A.
2. Answer any time and date prompts. (You should end up with an A prompt, that is an A> or A:, on your screen.)
3. Remove your DOS disk from drive A, but keep it handy. (You will need it for step #A6.)
4. Place your MILLIONAIRE disk in drive A.
5. Type SETUP and press your RETURN key.
6. You will enter a routine that will configure the program disk for your computer. Please follow the directions that appear on your screen.

B. HOW TO START A MILLIONAIRE SESSION

1. You must have an A prompt on your screen. If you have just finished preparing your disk, the A prompt should be on your screen. Otherwise, follow directions A1, A2, and A3.
2. Place your MILLIONAIRE disk in drive A.
3. Type START and press your RETURN key.
4. GOOD LUCK!

C. HELPFUL NOTES

1. The MILLIONAIRE disk will only work in drive A.
2. The MILLIONAIRE disk may not be copied to another disk or hard drive.
3. You only use the SETUP routine (step #A5) the first time you use the disk.
4. If you are asked for a 'COMMAND.COM' disk, it means your DOS disk.
5. If you are asked for a 'BATCH FILE' disk, it means your MILLIONAIRE disk.
6. Your RETURN key may be called an ENTER key, or have an arrow on it that goes down and turns to point to the left.

MILLIONAIRE LOADING INSTRUCTIONS
APPLE

A. HOW TO PREPARE YOUR DISK FOR USE

1. Your Apple MILLIONAIRE disk is ready for use as shipped. Just turn your computer off.

B. HOW TO START A MILLIONAIRE SESSION

1. Place your MILLIONAIRE disk in drive D1, and turn the power on.
2. After a short pause, you may begin.
3. When you have completed a session of MILLIONAIRE, the program will automatically start and you will be asked to enter NEW or SAVED, again.
4. When you are finished, remove your MILLIONAIRE disk from the disk drive.

MILLIONAIRE LOADING INSTRUCTIONS
ATARI

Make sure your BASIC cartridge is in the computer.

A. HOW TO PREPARE YOUR DISK FOR USE

1. Your Atari MILLIONAIRE disk is ready for use as shipped. Just turn your computer off.

B. HOW TO START A MILLIONAIRE SESSION

1. Place your MILLIONAIRE disk in your disk drive and turn the power on. After a short pause, you may begin.
2. When you have completed a session of MILLIONAIRE, the program will automatically restart and you will be asked to enter NEW or SAVED.
3. When you are finished, remove your MILLIONAIRE disk from the disk drive.

MILLIONAIRE LOADING INSTRUCTIONS
COMMODORE 64

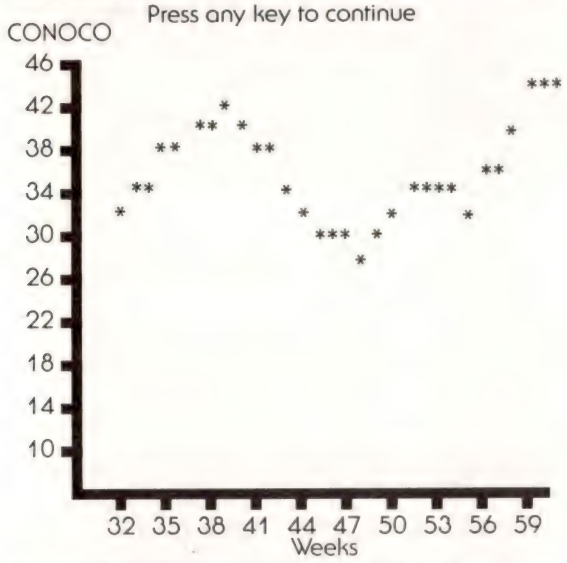
A. HOW TO PREPARE YOUR DISK FOR USE

1. Your Commodore 64 MILLIONAIRE disk is ready for use as shipped. Just turn your computer and disk drive on.

B. HOW TO START A MILLIONAIRE SESSION

1. Place your MILLIONAIRE disk in your disk drive and type LOAD "M", 8 and press RETURN.
2. When you see the blinking cursor, type RUN and press RETURN. After a short pause, you may begin.
3. When you have completed a session of MILLIONAIRE, the program will automatically restart and you will be asked to enter NEW or SAVED, again.
4. When you are finished, remove your MILLIONAIRE disk from the disk drive.

MILLIONAIRE



Use giants like GM and IBM to climb financial heights.
Enter the high-powered world of the New York Stock Exchange as a Novice with $10,000 and a range of 15 actual stocks (from five industry categories) as investment possibilities. You buy and sell in response to an array of influences on the Market in general and your Portfolio in particular. Among these is a constant stream of news events based on incidents that have, in fact, happened. As you progress, the game expands to include such sophisticated features as buying-on-margin, call options, put options, and borrowing against your net worth. **MILLIONAIRE** spans 77 weeks of activity. You'll be back for more.

BARON

THE FINANCIAL JOURNAL

REAL ESTATE AGENTS SMART AS TIGHT MONEY SLASHES HOME SALES.

REAL ESTATE INVESTMENT IN INDUSTRIAL MARKET 'NOT CLEAR.'

PLAYBOY CORP. SAYS LAND ACQUISITION CHALLENGED BY SUIT.

MAJOR EARTHQUAKE IN CALIFORNIA CATASTROPHE FOR REAL ESTATE.

KANSAS BANK LOST $9.5 MILLION ON BUILDING DEAL.

Amass a personal empire in real estate.
The factors to consider in real estate speculation — whether in **BARON** or in real life — are mind-boggling in their complexity: everything from fluctuating mortgage rates influenced by national and international events to neighborhood vandalism to your property. The greatest success is won by whoever masters this panorama of variables best. You start with $35,000 and have 52 game-weeks to parlay it into a million by buying, selling and developing commercial, residential and raw land (all with accurately represented property values) in five U.S. states. If there's a baron within you, this game will be an act of liberation!

TYCOON

BUY TRANSACTION REPORT

COMMODITY:	DEC WHEAT
TYPE:	LONG
CONTRACTS:	1
UNIT PRICE:	283.9 CTS/BU
CONTRACT SIZE:	5000 BU
CONTRACT PRICE:	$14,194.96
TOTAL VALUE:	$14,194.96
MARGIN/CONTRACT:	$ 1419.50
NET COST:	$ 1419.50

Outmaneuver the commodities market.
If you thrive on the abrupt twists and turns of a highly volatile marketplace, you belong in the intensely competitive arena of **TYCOON.** It requires you to devise flexible strategies, anticipate events and then react to them as you trade in gold, silver, copper, oil, treasury bills, and foreign currencies, as well as agricultural beans. You're given comprehensive charts plus vital background data to aid you in spotting opportunities amid actual commodity price trends of the past. Not a game for the fainthearted, **TYCOON** gives free rein to soar high — or plummet fast — without any of the actual risk.

SQUIRE

INVESTMENT MENU

1- BLUE CHIP STOCKS
2- GROWTH STOCKS
3- AA CORPORATE BONDS
4- B CORPORATE BONDS
5- OIL AND GAS
6- IRA
7- MONEY MARKET
8- COLLECTIBLES
9- REAL ESTATE
A- CATTLE FEEDING
B- COMMODITY MARKET

PRESS SPACE BAR FOR MAIN MENU

Enter Reference Number To Buy...

Plug in your own finances and pick a future lifestyle.
SQUIRE is unique among all computer games because, in addition to the basic game itself, it lets you play and practice your own personal "game of life." The basic game starts you at age 35 with the goal of retirement as a millionaire at 55. A whole universe of investments is open to you — stocks, bonds, real estate, commodities, and so forth — and your progress depends on the ones you select and the mix they create. The game also permits you to enter your own age, current assets, plus your target date for retirement and desired economic level. You can then explore a variety of investment strategies through any number of "dry runs" and discover which avenues hold the greatest promise for you personally.

IMPORTANT: READ THIS CAREFULLY

The Warranty Registration Card included with all programs must be sent in within 10 days after your purchase to validate the warranty.

In the event that the diskette should fail to operate within ninety days of purchase, return it to Blue Chip Software for free replacement. You **must** include proof of purchase. If the diskette fails to operate after the 90-day period, there will be a five dollar replacement charge.

MILLIONAIRE QUICK REFERENCE

COMPUTER INDUSTRY	CONTROL DATA	(CDC)
	IBM	(IBM)
	NCR	(NCR)
OIL & GAS INDUSTRY	CONOCO	(CNO)
	EXXON	(EXX)
	MOBIL OIL	(MOB)
RETAIL INDUSTRY	KMART	(KMT)
	SEARS	(SRS)
	TANDY	(TDY)
AUTO INDUSTRY	GENERAL MOTORS	(GM)
	AMERICAN MOTORS	(AM)
	BENDIX	(BDX)
HEAVY INDUSTRY	UNITED STATES STEEL	(USS)
	DOW CHEMICAL	(DOW)
	CATERPILLAR TRACTOR	(CAT)

NOVICE: Buy stocks but not on margin.
INVESTOR: Buy stocks on margin. Must have net worth of at least $12,000.
SPECULATOR — Buy stocks on margin and call options. Must have net worth of at least $18,000.
PROFESSIONAL — Buy stocks on margin, call options, and put options. Must have a net worth of at least $40,000.
BROKER — Buy stocks on margin, call options, put options, and borrow up to 80% of your net worth. Must have a net worth of at least $100,000.
MILLIONAIRE — All of the above and your net worth must be at least $1,000,000.

MENU: Display Menu
GRAPH: Display Graphs
NEWS: Display Journal and Stock Changes
PRICE: Display Stock and Option Prices
STOCK: Display Stock Portfolio
CALL: Display Call Option Portfolio
PUT: Display Put Option Portfolio
BUY: Start A Buy Transaction
SELL: Start A Sell Transaction
LOAN: Borrow Against Net Worth
WEEK; Advance To Next Week
SAVE: Save Game Status
QUIT: Quit Session Without Saving